Reg. No. : ....

Name : ....

**V Semester Master of Computer Application (M.C.A.)/M.C.A.
(Lateral Entry) Degree (C.B.S.S. – Reg./Suppl. (Including Mercy Chance)/Imp.)
Examination, November 2020
(2014 Admission Onwards)
Elective – IV : MCA 5E13 : MOBILE COMPUTING**

Time : 3 Hours

Max. Marks : 80

Instructions : 1) *Answer **any ten** questions from Section – **A**. **Each** question carries **three** marks.*
2) *Answer **all** questions from Section – **B**. **Each** question carries **ten** marks.*

SECTION – A

Note : Answer **any ten** questions. Each question carries **three** marks.

1. Distinguish between Mobile Computing and Wireless networking.

2. List the uses of RFID in mobile computing.

3. Discuss the procedures of multiple access in mobile computing.

4. What are piconets ?

5. Why is WiMAX forum formed ?

6. What do you mean by GSM Services ? List various services including its subcategories.

7. Explain in what ways is GPRS better than GSM.

8. Classify the functions of HLR and VLR.

9. What are the features of third generation wireless networks ?

10. Define Voice over IP.

11. List the merits and demerits of convergence technologies.

12. List the features of mobile voice over IP.

(10×3=30)

P.T.O.

SECTION – B

Note : Answer **all** questions. **Each** question carries **ten** marks. (5×10=50)

13. a) Explain in detail about the various types of networks. 10

OR

b) Explain the functions and architecture of mobile computing. 10

14. a) Explain in detail about the satellite communication system. Also mention its merits and demerits. 10

OR

b) Write a short note on the following :

   i) Mobile computing through telephone. 5

   ii) IVR and its benefits. 5

15. a) With a neat diagram explain various subsystems involved in the GSM system architecture. 10

OR

b) i) Explain GSM authentication and security. 5

   ii) Explain the data services in GPRS. 5

16. a) Explain in detail the protocols used in WAP. 10

OR

b) Write a note on the following :

   i) WML script. 5

   ii) IS-95 standards. 5

17. a) Write a note on the following :

   i) Voice over WLAN. 5

   ii) SIP in mobile computing. 5

OR

b) i) Write a note on H.323 Framework. 5

   ii) Briefly explain the applications of VoIP. 5

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